DEPARTMENT OF HOUSING & COMMUNITY DEVELOPMENT CONSTRUCTION REHABILITATION REVIEW GUIDELINES

The Department of Housing & Community Development (DHCD) has developed construction and/or rehabilitation guidelines for projects that receive state HOME/HSF/CIPF funds. The guidelines are intended to promote high quality standards, which are site appropriate and cost effective. DHCD HOME/HSF/CIPF staff will review all project plans and specifications for each assisted project to ensure that the guidelines are being followed. The design and construction guidelines of other funding agencies also must be followed with the higher standard of each lender becoming the minimum requirement.

DHCD review of architectural plans and specifications is required for all new construction, buildings with additions, and for most substantial rehabilitation projects. In certain instances, DHCD may decide to review only project specifications. However, DHCD will review architectural plans, including specifications, if a rehabilitation project includes any of the following characteristics:

- Changes in occupancy
- Change of layout/configuration
- Change of egress
- Federal Section 504 and Fair Housing Act accessibility requirements
- Historic Landmark review
- Room or unit size less than DHCD's design standard
- Other unusual site or building conditions determined by the DHCD design review staff including environmental remediation

CONSTRUCTION/REHABILITATION REVIEW PROCESS

The DHCD review process corresponds with the typical architectural phases of project development. DHCD requires current and/or updated drawings and other information for the following:

Schematic Review: This is a first pass review of the project proposal and focuses on issues of unit design and cost efficiency. The following documents are typically required for a schematic review:

- Site Plan showing footprint and proposed landscaping
- Proposed floor plans
- Exterior elevations
- Preliminary construction budget

Final Review: Prior to closing the loan on the project, the developer must submit the following to DHCD for review and approval:

- Final plans and specifications
- Final construction budget
- Final construction disbursement schedule

DHCD DESIGN REVIEW

When developing project plans and specifications, DHCD recommends that developers engage an architect/engineer and/or cost estimator to prepare plans and costs for project work. When complete plans are submitted, HOME/HSF/CIPF staff review them for compliance with all applicable regulations and conformance to DHCD design guidelines. A meeting between the developer, project architect and DHCD staff may be arranged to discuss any design concerns or DHCD staff may contact the developer to make comments or suggestions for improvements. DHCD approval of the final set of plans is required before a project can move forward to loan closing.

The DHCD review does not replace the reviews or regulations that may be required by other agencies, nor is it replaced by the review of other agencies.

In addition to the HOME/HSF/CIPF regulations, HOME/HSF/CIPF-assisted projects are subject to the following administrative and funding source regulations, where applicable:

- Local Zoning Ordinances
- Massachusetts State Building Code
- Massachusetts Electrical Code
- Massachusetts Plumbing and Heating Code
- Massachusetts Fire Regulations
- Massachusetts Sanitary Code
- Massachusetts Dept. of Public Health Requirements
- Massachusetts Historic Commission Recommendations
- U.S. Dept. of Energy Regulations
- Massachusetts Dept. of Environmental Protection Regulations
- U.S. Environmental Protection Agency Regulations
- HUD Rehabilitation Guidelines
- HUD Section 8 Housing Quality Standards
- Americans with Disabilities Act
- Section 504 and Fair Housing Act

The development must comply with all other local, state and federal requirements governing the project including but not necessarily limited to zoning, historic preservation, sewage/septic systems, and environmental protection.

The following design recommendations are intended to promote the creation of good quality housing that is attractive, comfortable, and marketable to prospective residents. The recommendations comply with or exceed the minimum standards required by the State Building Code, State Sanitary Code and HUD regulations.

They are intended for guidance when planning the rehabilitation of existing structures and new construction, and should be met whenever practicable. In some cases, however, constraints such as existing partitions, walls, plumbing, etc., or excessive construction costs will prevent compliance with these standards. If it is not feasible to comply with all of these standards, an explanation should be provided in the application.

Overall unit size				
Units should be no less than the following:				
	Floor Area			
-SRO	120 sq.ft.			
-Enhanced SRO	175 sq.ft. (includes food prep area & bathroom)			
-One-bedroom unit	600 sq. ft.			
-Two-bedroom unit	750 sq. ft.			
-Three-bedroom unit	900 sq. ft.			
-Four or more bedroom unit	1100 sq. ft			

Minimum room size

Rooms should be no less than the following:

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	<u>floor area</u>	minimum dimension		
-Primary bedrooms	120 sq. ft.	11 ft.		
-Secondary bedrooms	100 sq. ft.	9 ft.		
-Living room	150 sq. ft.	12 ft.		
-Dining room	100 sq. ft.	10 ft.		
-Living/dining room combo	200 sq. ft.	12 ft.		
-Full bathroom	40 sq. ft.	5 ft. by 8 ft.		

- If a room has a sloped ceiling, any portion of the room measuring less than 5 feet from the finished floor to the finished ceiling should not be included in the measurement of the floor area.
- Closets and storage should not be included in the measurement of the floor area.

Kitchen

The size of the unit should determine how much counter space should be provided.

	counter space	min. width/circulation
One bedroom unit	6 linear feet	4 feet.
Two bedroom unit	8 linear feet	4 feet
Three or more bedroom unit	10 linear feet	4 feet

• The minimum total linear feet of counter does not include the space occupied by the sink, stove, and refrigerator.

Bathroom

The size of the unit determines the number of bathrooms.

One-bedroom unit One bathroom Two-bedroom unit One bathroom

Three-bedroom unit

One and a half bathrooms

Four or more bedroom units

Two bathrooms

ADDITIONAL DESIGN REVIEW REQUIREMENTS

- Projects funded with federal funds must meet accessibility guidelines as mandated under Section 504 and the Fair Housing Act.
- Projects funded with State funds must have 5% (or at least one) of the units created in projects containing 20 or more housing units accessible to persons with disabilities.
- Prior to insulating and finishing walls, solid 2 x blocking shall be installed where accessories such as grab bars, towel bars, soap and toilet paper holders are to be located. In projects of more than 3 units of new construction, all bathrooms shall be blocked to permit the retrofitting of grab bars in the tub surround area and around the toilet as required by MAAB Code regarding adaptability.
- A closet in each bedroom, entry closet, and linen closet should be provided. Closets should have a minimum depth of two feet.
- Kitchens should be designed with a pantry or broom closet.
- All applicable appliances shall be Energy Star* rated.
- Range hood vented to outdoors.
- Garbage disposal, ½ HP minimum
- 30" Gas range with self-cleaning oven.
- Dishwasher
- Frost-free refrigerator sized per number of bedrooms
- Storage space should be provided wherever possible.
- The design should optimize the use of space. Unit size and layout should maximize efficiency and minimize circulation (hallways), provide spacious furnishable main living areas and provide adequate storage.
- For all buildings under rehabilitation, designs shall include durable, low maintenance, energy efficient systems and materials. Electric heat is not acceptable, and electric stoves are strongly discouraged. All new construction shall be designed to meet the National

Energy Five Star efficiency performance standard of 86%. All procedures used for this Five Star rating shall comply with National Home Energy Rating Systems guidelines.

- Where practicable, cementitious siding materials, such as Hardi-plank or Cem-plank is the preferred exterior siding rather than vinyl cladding for residential buildings;
- Specifications should include fiberglass/asphalt roofing shingles with a minimum of a 25-year warranty or fully adhered compounded rubber sheet elastomer (EPDM) single membrane for flat roofs. All pitched roofs shall have ridge and/or soffit venting.
- Window guards or heavyweight screening shall be installed in windows of housing units where a child 6 or under will be living.
- Painted finishes should have 1 coat primer and two finish coats.
- Bathroom floors shall be tiled with a floor grade, non-slip glazed or unglazed ceramic tile or linoleum (marmoleum or equal). VCT is not approved for bathrooms. Linoleum sheet goods shall be limited to entryways, kitchens, bathrooms, and dining rooms.
- Carpeting of 26 oz. minimum fabric face weight per square yard is the standard for unit living rooms and bedrooms.
- Stacked plumbing is strongly recommended in order to reduce material and construction costs, and to centralize water and sewer lines.
- All mechanical equipment should be located and installed so that it cannot be seen from the surrounding street. Special attention must be given to preventing excessive noise or other kinds of annoyance from any mechanical equipment.

PLAN REQUIREMENT GUIDELINES

This section outlines the type of drawings and other information that should be submitted to DHCD for HOME/HSF/CIPF rehabilitation of existing buildings or new construction projects. It is recommended that an architect and/or construction cost estimator prepare the plans and construction budget. For new construction, it is required that an architect prepare the plans and specifications. Incomplete plans will not be reviewed.

Site Plan: Indicate the location of the building, property lines, access to the building from the street, landscape, curb cuts, driveways, orientation (north arrow). Suggested scale: 1:20 (1" = 20")

Existing Floor Plan for each floor, including basement. Drawings should be drawn at 1/4 scale (1/4" = 1'-0"). The existing floor plans should include the following information:

- Structural elements such as existing bearing walls, columns (indicate this with a note or graphically, e.g.: shade in the structural walls)
- Direction of floor joists if structural changes are being made
- Existing plumbing, ventilation chase, fireplaces and any other information that affects design

Proposed Floor Plans: Drawings should address changes of layout, removal of walls or structural elements, or any other changes other than minor non-structural repairs (for maintenance purposes).

The proposed floor plans should include the following information:

- Unit Floor Area (i.e.) the total area within the unit exterior walls
- Room Areas (i.e.) the area within the perimeter wall of the room excluding storage and closet space
- Overall and interior dimensions
- Vertical structural elements
- Wall thickness to scale
- Location and size of windows, indicating the window-sill height (measured from the finished floor).
- Ceiling heights
- Location of mechanical equipment, meters, and electric service panels
- Location of water, gas, sewer, and electric services.
- In the case of attic renovation, drawings should be provided indicating ceiling heights, knee wall heights, dormers location etc.

Elevations: Drawings should include front, side and rear elevations.

LANDSCAPING GUIDELINES

This section outlines suggestions for site improvements and landscaping for HOME/HSF/CIPF projects.

Site Demolition and Clearing:

• The removal of all hazardous materials such as asbestos (ACM's) and lead (LCM's) shall be carried out according to all applicable state and federal regulations. A summary and accurate estimate of the 21-E soil remediation plan, along with grading plans shall be provided.

Tree /Shrub Pruning and Removal:

- Remove trees that originate at foundation wall of building or present a hazard to the structure
- Remove dead trees.
- Trim stump to finished grade level or below
- Prune back unhealthy branches that overhang roof or brush walls of building

- Prune branches that may threaten utility connections
- Clean up and properly dispose of brush and wood
- Remove shrubs that are diseased, those that obstruct walkways, drives and pathways, and those that obstruct windows.

Grading: Restore grade to previous condition or better including a 6" minimum deep planting bed of clean loam/topsoil. New grade should slope away from buildings and fit the existing neighboring grades, particularly at street or sidewalk. Grades for lawn areas should not exceed 20%. The grade across paved areas should not exceed 4%.

Paving, Fencing & Walls:

- Restore walks and driveways to good condition
- Fences should never exceed 6 feet. Material and style should be appropriate to surrounding neighborhood.

Lawns:

- Sod or seed new lawns. If seeded, pegged cloth or salt hay should be used to prevent erosion on slopes in excess of 6%. If lawn area is shady, seed or sod should include appropriate mix of fescues or other grasses, which will tolerate shade. The addition of 5% white clover to the seed mixture will produce a healthier lawn.
- Require the GC to maintain all lawns until after the first cutting.

Plantings: Select hardy, maintainable, regional stock. All plantings should be placed in a manner that enhances the appearance of the property and is in keeping with the surrounding neighborhood.

HOME/HSF HOMEBUYER PROPERTY GUIDELINES

Below is a suggested list of amenities and items that should be included in units to be marketed to first-time HOME/HSF buyers. This list has been developed based on guidelines from other DHCD funded programs.

- Cementitious siding such as Hardi-plank or Cem-plank. (the use of vinyl siding is discouraged).
- Wood or cementitious exterior trim
- Grill for basement or ground floor windows
- Window guards/ screens for upper floors
- Front & rear porch lighting
- Intercom & buzzer entry systems

- Front door peephole
- Exterior motion detection lighting: rear porch & driveway
- Security alarm system
- Switched outlets in living room and bedrooms
- 20 amp electrical circuits: living room, kitchen and master bedroom
- Telephone jacks and/ or modem connections in kitchens, living room and all bedrooms
- Cable jack (2) specify locations
- Smoke detectors shall be hard-wired with a battery backup to meet the Electrical Code
- 30" gas range, frost-free refrigerator and dishwasher*
- Range hood vented to outside (if layout allows)
- Fiberglass tub surround in bathrooms
- Carpet 26 oz. (as needed)
- Laundry hook-ups
- Fencing and landscaping

* All appliances must meet or exceed the latest Energy Star* efficiency standards